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Political Alternation as a Restraint on Investing in Influence

Evidence from the Post-Communist Transition

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Abstract

The authors develop and implement a method for measuring the frequency of changes in power among distinct leaders and ideologically distinct parties that is comparable across political systems. The authors find that more frequent alternation in power is associated with the emergence of better governance in post communist countries. The results are consistent with the hypothesis

that firms seek durable protection from the state, which implies that expected political alternation is relevant to the decision whether to invest in influence with the governing party or, alternatively, to demand institutions that apply predictable rules, with equality of treatment, regardless of the party in power.

This paper—a product of the Growth and the Macroeconomics Team, Development Research Group—is part of a larger effort in the department to study political economy of democratization. Policy Research Working Papers are also posted on the Web at <http://econ.worldbank.org>. The author may be contacted at bmilanovic@worldbank.org.

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Political Alternation as a Restraint on Investing in Influence: Evidence from the Post-Communist Transition

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I. INTRODUCTION

It is often held in political science and democracy studies that several alternations in the seat of power between genuinely different political groups are needed before democracy is institutionalized (Przeworski, 1988; Huntington, 1991). In this paper we examine whether, after initial democratization, political alternation also fosters the establishment of the rule of law. Whereas much recent empirical work on the quality of governance institutions emphasizes the effects of geography and history and thus does not identify a path towards improving governance,¹ in this paper we examine the effect of current political processes on the emergence of the rule of law.

In order to investigate this question empirically, we develop, for the first time, a methodology for measuring the frequency of changes in power among distinct leaders and among ideologically distinct groups (parties) that is comparable across political systems. We do this by identifying the locus of power for a range of political regimes, defining what constitutes a change in the person or parties that hold power, and finally defining when there is also ideological change in persons or parties that hold power. We use the methodology to investigate the effect of political alternation on the quality of governance in 27 postcommunist countries.

The postcommunist countries are an interesting setting in which to explore the role of political alternation. In going from a command economy to a market economy, an entirely new set of rules is required. Does political alternation hurt or help in establishing those rules? Intuition provides little guidance. Frequent political alternation would be an impediment to reform if alternation increased the discount rate of politicians or if electoral competition created greater motivation or opportunities for corruption. Many countries in Latin America and elsewhere (including Nicaragua, Ecuador, Guatemala, Panama, Honduras, Bolivia and Bangladesh) have been

¹Dixit (2005) in his survey of the literature on institutions and growth, wryly concludes: “Interpreted literally as recipes or policy recommendations [for improving governance, the literature would] require a less-developed country to use plate tectonics to move itself to a more favorable location, or to turn the clock back and invite British colonizers, of course cleaning up the local disease environment and getting rid of mineral resources and resources suitable for plantation agriculture beforehand. As a practical matter, these findings are merely telling countries to accept their fate” (pp. 4-5).

characterized by “alternation of power between genuinely different political groupings ...[which] seem only to trade the country’s problems back and forth from one hapless side to the other” (Carothers, 2002, p. 11) It is not uncommon to hear that frequent changes in political leadership are a binding constraint to sustaining reform momentum, and to hear China mentioned as a model of political stability that facilitated reforms in institutions of economic governance.

On the other hand, the Russia scholar Aslund (2002, p. 120) writes that,

The long tenure of the infirm president Yeltsin...provided Russia with a ‘stability’ that favored the corrupt elite. Poland, the three Baltic countries, and Bulgaria have changed governments on average every year for the last decade, and they are among the most successful reformers (p. 121).

Consistent with this view, Grzymala-Busse (2003) identifies sharp contrasts in the quality of governance and in the institutions that developed in Poland and Hungary, which had frequent political alternation, and the Czech Republic, Slovakia, and Russia, which were one-party states throughout much of the period of her study. Poland and Hungary established a civil service and judicial and enforcement bodies that were insulated from interference by the governing political party, and regulated political party funding and made it public. Russia, the Czech Republic, and Slovakia did not, and in those states, ownership rights were more closely linked to political patronage. In Russia, patronage has led to an outcome where numerous laws provide special treatment to a single, named firm (Slinko, Yakovlev, and Zhuravskaya (2004), and corruption has a pervasive effect in undermining reform efforts (Black, Kraakman, and Tarassova, 2000; Black and Tarassova, 2003)).

In this paper, we present a simple model of firm behavior that highlights the link between expected political alternation and the emergence of the rule of law. Our key theoretical assumption is that firms seek *durable* protection or favors from the state. Influential firms can obtain durable protection (as private goods) from the governing party or leader when political alternation is low and, by doing so, they undermine the credibility of the state as an impartial protector of rights (the rule of law). However, when expected political alternation is high, clientelistic relationships

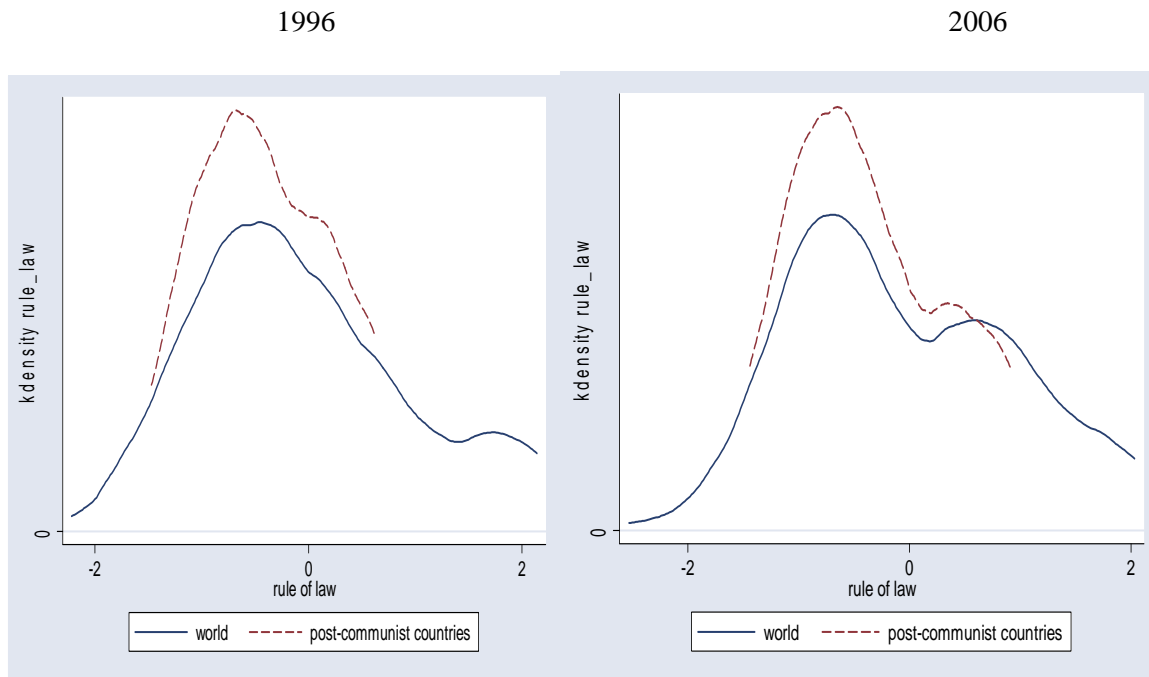
provide little security. The model predicts that when firms believe that political alternation is more likely, they will invest less in influence.²

We test this prediction for the 27 post-communist in Eastern Europe and the former Soviet Union by constructing a measure of the frequency of change in power among distinct leaders and among ideologically distinct groups (parties) that is comparable across political systems. We use lagged cumulative political alternation as a measure of expected future political alternation.³ To measure the quality of governance in the post-communist countries, we use the indicator for the rule of law constructed by the World Bank (Kaufmann, Kraay and Mastruzzi 2007; hereafter, KKM). A higher score corresponds to better governance, and the mean and median are normalized at zero and the standard deviation at one. Figure 1 shows that there is great diversity of governance outcomes for the post-communist countries relative to the diversity of outcomes in the world. Post-communist countries with the highest rule of law scores (Estonia and Slovenia) are in the 75th percentile of all countries in the world, whereas those with the lowest scores (Kyrgyzstan and Turkmenistan) are in the bottom 10th percentile.

² A related role for political alternation in the quality of governance is studied in Dixit, Grossman and Gull (2000). In their model, two parties expect to alternate in power indefinitely, and that prospect makes it in the self-interest of each party to share wealth broadly rather than privileging their own constituents.

³ In principle, how alternations are spaced in time should also be taken into account, but in our sample, we did not have examples of quick successions in power followed by a long reign (or the reverse), so that relatively little information is lost by considering only the cumulative number of alternations.

FIGURE 1. DISTRIBUTION OF KKM RULE OF LAW SCORE FOR THE WORLD AND POST-COMMUNIST COUNTRIES



The challenge is to try to identify the role that expected political alternation (measured by lagged cumulative alternation) plays in explaining the variation in rule of law scores. One source of difficulty is simultaneity in the relationship between alternation and quality of governance. Causation may run in both directions. Expected alternation may change firm behavior in ways that foster the emergence of the rule of law, but greater adherence to the rule of law could increase the likelihood of alternation by making elections fairer, or decrease the likelihood of alternation by improving outcomes and thus voter satisfaction with the incumbents. Lagging political alternation, as we do, does not fully resolve this problem because the quality of governance in one period might affect the quality in later periods.

A second difficulty is spurious correlation. For example, it might be that that the opportunity to join the European Union by virtue of proximity to Western Europe causes both high alternation and good governance, and that there is no causal connection between the two. The

opportunity to join the European Union makes a particular set of rules focal and leads individuals to anticipate large rewards from coordinating on them, which helps explain the successful transitions in those economies.

To address these issues, we use an instrumental variables approach. We use as instruments for political alternation the literacy rate immediately prior to the Communist takeover and the rate of urbanization around 1990. We argue that higher literacy prior to the communist takeover makes citizens better able to form independent political judgments about the period of communist rule, and better able to form political parties once communism collapses. These factors would tend to increase the likelihood of political change in the immediate aftermath of the collapse of communism. We use urbanization as an additional instrument because it should lower the cost of political mobilization and make it easier for several genuinely different parties to emerge. Since we control for current per capita income, pre-communist education and urbanization are not likely to have direct effects on the dependent variable. We cannot rule out, however, that unobservable factors that contribute to pre-communist literacy or urbanization also contribute to higher quality of governance today.

The main empirical findings are as follows. In OLS and IV regressions, but not in regressions with country fixed effects, the quality of governance is significantly positively related to lagged cumulative political alternation. Controlling for per capita income, democracy, war, and natural resource wealth, an additional alternation in OLS regressions is associated with an improvement in governance by one-third of the post-communist country standard deviation in rule of law scores. In the IV regressions, we find a large influence of cumulative lagged alternation on the quality of governance. The improvement in governance associated with one additional political alternation is now even larger; it is one full standard deviation. However, because we cannot rule out spurious correlation in our instruments, we view our empirical results as suggestive, not conclusive.

This paper is an exercise in positive political economy,⁴ which is playing an increasing role in the study of economic development. We test a simple positive model of investment in patronage relationships to ask a normative question about policy (should policy try to expand or contract the likelihood of political alternation), which we treat as something that exogenous factors can influence.⁵ In emphasizing in our model demand side rather than supply side factors in the rule of law, we are guided by a widely held view among scholars. As the political philosopher Holmes put it, “Putin may sincerely want to introduce the rule of law. He may repeatedly announce that he is going to create it...These subjective intentions are irrelevant, however. The rule of law is going to emerge only if there are strong constituencies supporting it.” (Holmes, 2002, p. 87; see also Symposium 1999). Power-sharing compromises in the period immediately following political liberalization affect policies, such as electoral rules, public funding of political parties, media access, and requirements of supermajorities in parliament, which in turn influence political alternation (Przeworski, 1988; Grzymala-Busse 2003, pp. 1135-36). As long as one believes that exogenous factors can influence the choice of such policies, our empirical results provide suggestive evidence suggest that one way to improve governance after an initial period of democratization is to adopt measures that increase electoral uncertainty.

In Section II, we present our model. In Section III, we describe our measures of political alternation. In Section IV, we discuss the estimation strategy and economic identification. Section V contains the empirical results, and Section VI concludes the paper.

II. THE MODEL

We begin with a discussion of the logic of our model.. Particularly at the early stages of an opening to democracy, the political process is easily corrupted. When civil society, the media, and representative institutions are weak and the legal boundaries on corruption are neither well defined

⁴ One useful definition is Rodrik (1999).

⁵ Earlier work examines other policies that can help create—or undermine—the demand for a rule of law, including privatization, macroeconomic policy, and controls on international capital flows. See Black,

nor enforced, special interests have few constraints on their ability to buy politicians. Further, in the immediate aftermath of the collapse of communism, the weakness of legal institutions to define and protect property rights creates insecurity that pushes firms to look for alternatives. If that is the case, firms, which are under pressure to survive from day to day as well as to make investments over the longer run, will tend to shift a significant part of their resources in money and time into “investing in influence,” since the returns on influence acquisition will be high. By investing in influence, we mean an activity that is broader than mere bribery or corruption. The activity also includes deals that cannot be strictly ruled illegal, in which a political official uses the power of his office to obtain private gain for himself and his clients.⁶

The most direct way to break the vicious circle of weak institutions and strong particular interests is through alternations in power. When alternation occurs, the set of political players in power changes. While these players may, in their turn, be beholden to some interest groups, it is unlikely that these would be the *same* interest groups that supported the previous government. Thus the rate of return to buying influence for the previous group drops sharply. But this is not merely a replacement of one group of influence-buyers by another. A more fundamental change occurs. The newly powerful influence-buying groups realize that the same fate may await them too.

The expected return on influence-buying falls if power changes hands and individuals revise downward their expectations that any given party will long retain its hold on power—that is, if democracy and political alternation become routinized. Political alternation plays a “signaling” function. If the alternation occurs as a result of an election, then alternation conveys information

Traakman, and Tarassova (2000) on the first policy, Hoff and Stiglitz (2004, 2008) on the first and second, and Qian (1999) on the third.

⁶A few examples are illustrative: (1) In Slovakia, bribery was not illegal under the Mečiar government (Grzymala-Busse 2003, p. 1139). (2) In the Czech Republic and Slovakia, political parties could obtain government loans, which were then frequently paid off by business interests (Grzymala-Busse (2003, pp. 1137-8). (3) In Russia, the most egregious case of partiality by the Russian state was the loans-for-shares program in 1996. On a much smaller scale, Slinko, Yakovlev, and Zhuravaskaya (2004) document the

that the rules of the game have changed compared to the old system and that hold on power is time-bound and obeys precise formal rules. “Sweet deals” may be rapidly undone—not by the caprice of the rulers but by the popular vote. In a stable authoritarian system, an investor in influence has to worry about not offending the ruler and making sure that the ruler lives up to his implicit bargain. But in a stable democracy, the bargain is not enforceable even if there is good will on both sides, for it could happen that the rulers are thrown out of office. *With* political alternation, one set of beliefs and institutions would thus be created; *without* it, an “old” set of beliefs and institutions is much more likely to be held and validated. Until political alternation is routinized, actors may even doubt whether the incumbent party or leader will accept defeat in a popular vote and play according to the formal rules.⁷

If the idea of alternation becomes accepted, firms seeking predictable treatment from the state will face the following choice: either to try to influence the entire political spectrum of parties, or to forsake clientelistic relationships with political parties. Some, of course, may pursue the first strategy. Yet this may be a very costly option: it means paying for preferential treatment more than once. Further, unless the differences among the political parties are slight, ideological divides may make some clientelistic relationships infeasible (*e.g.*, an avowedly free trade party will be more difficult to bribe for protectionist legislation; a nationalist party is less likely to accept bribes from a minority group that seeks preferential access to state contracts). Thus, we would expect that more frequent alternations in power between different groups would weaken the market for influence. It would also weaken the incentives to invest effort in destroying nascent institutions that would restrain arbitrary action by the state. In these ways, we would expect more frequent

common occurrence of legislation providing benefits to only a single named firm. See also Varese (2001, chs. 1-2).

⁷ Uncertainty regarding the stability of democracy characterized, for example, the transitions in Spain (recall Tejero’s attempted coup), Portugal, and Greece. An overview of all countries that experienced a movement away from authoritarianism in the past thirty years concludes that, “By far the majority...have not achieved relatively well-functioning democracy or do not seem to be deepening or advancing whatever democratic progress they have made” (Carothers, 2002, p. 9).

alternations in power to support the slow legal process that is entailed in creating a rule-of-law state.

To capture this intuition, it suffices to use a two-period model that incorporates two general features of investing in influence. First, the payoff is obtained in a lengthy (more than one-period) process. Our focus is on “grand corruption,” situations where firms purchase rules of the game that privilege their own interests, protection from competitors, favorable judicial decisions, the right to make privatization bids, and so on. Such privileged protection or access normally entails government actions that occur *over time*; they are not one-off deals. In our model, investors in influence seek to obtain a durable good from influential politicians.⁸

The second feature is that corruption contracts are enforced only as long as the political patron remains in power. If there is a change in the seat of power, the investor will lose his privileges and incur an additional loss, which might take the form of a loss on sunk investments or a punishment imposed by a successor government. Russia’s experience illustrates the vulnerability to political risk of business empires based on politically protected property rights. Braguinsky (2008, esp. Figure 1) finds that among the 300 oligarchs judged by experts as most influential in Russia in 1995, the peak period of separation of owners from the assets they controlled occurred in the three-year period (1998-2001) that included the 1999 transfer of power from Yeltsin to Putin, and that 43 percent of the oligarchs expropriated when Putin was in power faced punitive actions in 2000-2005 (including criminal investigations, jail, forced immigration, and assassination).

If there is no change in the seat of power, then we assume that the contract is fulfilled. We do not model how the contract is enforced. It could be self-enforcing in a scenario of repeated

⁸Thus, we assume that politicians also have a two-period time horizon. This assumption might not hold in highly politically unstable countries; Bates (2004) writes that in Angola and Liberia, the time horizon of politicians is so short that they do not in general sell property rights protection; anything that government can easily appropriate, it loots. But in the transition countries, the sale of property rights (as a private good) is well documented; see, *e.g.*, Hellman, Jones, and Kaufmann (2003).

interactions,⁹ or it could be enforced by the threat of sanctions from a network of firms.¹⁰ The specific assumptions of the model are described below.

Set-up of the model

Consider an economy where there are a large number (a continuum of mass one) of firms, which differ in their ability to invest in influence with the governing political party to obtain privileged protection from the state. θ denotes a firm's ability to invest in influence. θ is distributed according to the continuous, differentiable cumulative distribution function $H(\cdot)$, with $H(\cdot) > 0$ for $\theta > 0$. In the real world, many factors would give rise to differences across firms in the ability to earn "influence-rents": political or personal closeness to the powerful officials, links of friendship or kinship, the size of the enterprise (larger firms have more bargaining power and control more resources), and membership in a network of firms that can enforce bargains between a firm and the state.

Each firm has an opportunity to make one bargain (a "corruption contract") with the political party in power. In the bargain, the party uses its *de facto* authority to create rents by enforcing property rights selectively (as a private good) or extending other privileges. The firm must decide whether or not to act. If it does not act, it receives a return normalized at zero. If it invests in influence and the party remains in power in the second period, then the firm receives a net return $R > 0$ in this period and the next. But if the party loses office, then in the second period, the firm will suffer a loss ℓ . R is the return that shares the rents from the "corruption contract" between the politician and the firm according to the Nash or some other bargaining solution. R

⁹A case in point is reported in Freeland (2000, ch. 12): In 1997, one of those who had helped ensure President Yeltsin's reelection in exchange for the "loans-for-shares" arrangement believed that the government had not given him a fair share of state assets. He threatened to block—and did block—actions that Yeltsin wished to take by exposing corruption. The revelations were a factor in delegitimizing Yeltsin's administration. An additional class of enforcement devices, which is important in practice but cannot be captured in a two-period model, are reputational concerns: parties who expect to stay in power or return to power have an interest in being able to enter into clientelistic arrangements in the future.

¹⁰Haber *et al.* (2003) argue that, in Mexico, networks of manufacturing firms control labor unions, which play the role of third-party enforcer of promises. If the party violates a promise with a member of the network, the network can call a general strike and bring down the government.

depends on a firm's type (firms with a higher value of θ earn a higher net return to investing in influence) and also on the institutional constraints on rent-seeking from the state, such as the separation of powers, denoted by ρ . We assume that these institutions constrain the ability to extract rents from the state more for those with a higher value of θ . Formally,:

$$(1) \quad R = R(\theta; \rho) \text{ with } R_\theta > 0, \quad R_\rho < 0, \quad R_{\theta\rho} \leq 0.$$

We use subscripts to denote partial derivatives, so R_θ denotes $\partial R / \partial \theta$.

Given these assumptions, the expected payoff v to investing in influence is

$$(2) \quad v(\theta, \pi; \rho) = R(\theta; \rho) + \delta \{ [1-\pi]R(\theta, \rho) - \pi \ell \},$$

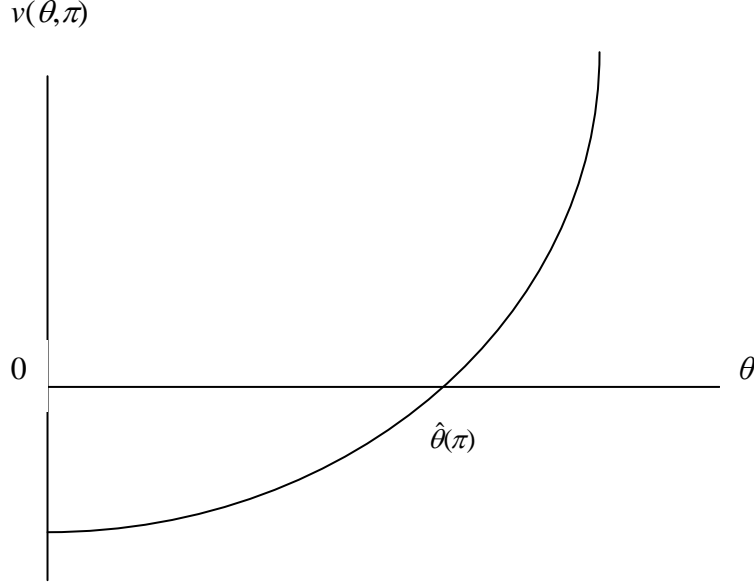
where δ is the discount factor and π is the probability that the governing party loses power at the end of the first period. The first term gives the first period's return, which occurs with certainty. The second term gives the second period's expected return, which depends on the probability of change in the group that holds effective power.¹¹

We are now ready to consider the firm's decision whether or not to invest in influence. The payoff to investing in influence is increasing in the firm's type, θ , as depicted in Figure 2. For a given value of π , monotonicity of v in θ implies that there exists a unique critical value or *switch point*, $\hat{\theta}(\pi; \rho)$, such that firms with $\theta > \hat{\theta}(\pi; \rho)$ invest in influence and firms with $\theta < \hat{\theta}(\pi; \rho)$ do not. $\hat{\theta}(\pi; \rho)$ is the type that is indifferent between investing and not investing in influence, and is implicitly defined by

$$(3) \quad v(\hat{\theta}, \pi; \rho) = 0.$$

¹¹ Preferential treatment obtained by some firms may impose a cost on other firms through unfair competition and poorer public-goods provision, as Slinko, Yakovlev, and Zhuravskaya (2004) show has occurred in Russia. As a result, the relative return to each firm to investing influence (relative to not doing so), may be increasing in the number of others who invest in influence. Our model abstracts from this possible effect, but taking it into account would strengthen our results because of a social multiplier effect.

FIGURE 2. FIRMS DIFFER IN THE ABILITY TO INVEST IN INFLUENCE, AND THE PAYOFF IS POSITIVE FOR TYPES $\theta > \hat{\theta}$.



Firms above the switch point, of which there are a fraction $1-H(\hat{\theta})$, invest in influence. We denote this fraction by x :

$$(4) \quad x = 1 - H(\hat{\theta}(\pi, \theta; \rho)).$$

We now derive comparative statics results. Consider the effect of a change in beliefs about the probability of political alternation. An increase in π lowers the expected return to investing in influence, which increases the switch point, so fewer firms invest in influence. Figure 3 provides the basic insight: the switch point moves from $\hat{\theta}(\pi_1; \rho)$ to $\hat{\theta}(\pi_2; \rho)$. Formally, we have

$$(5) \quad \frac{d\hat{\theta}}{d\pi} = -\frac{v_\pi}{v_\theta} = \frac{\delta[R(\hat{\theta}) + \ell]}{R_\theta[1 + \delta - \delta\pi]} > 0,$$

and the resulting reduction in the proportion of firms that invest in influence is

$$(6) \quad \frac{dx}{d\pi} = -H'(\hat{\theta}) \frac{d\hat{\theta}}{d\pi} < 0.$$

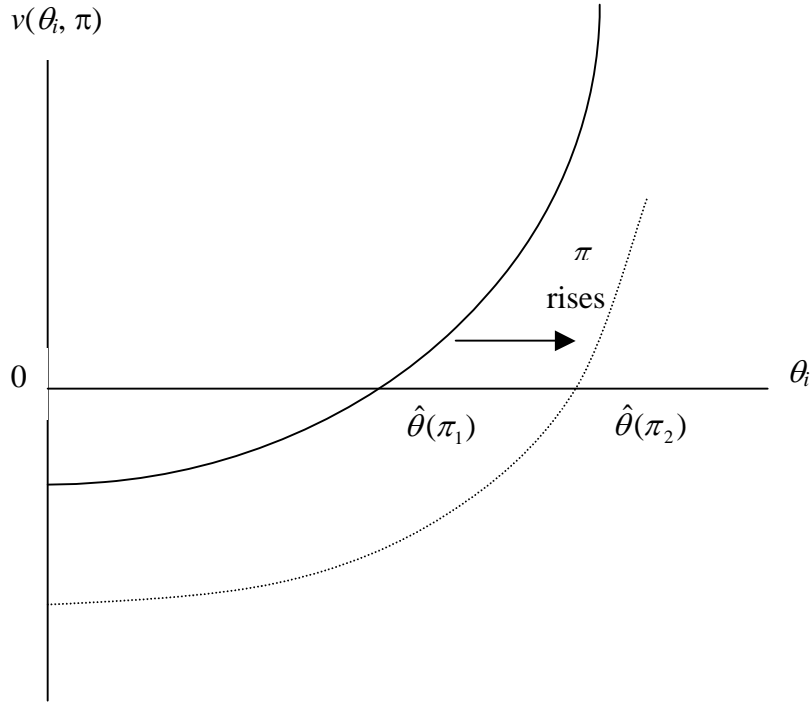
Total expected rents to firms that invest in influence are

$$M = \int_{\hat{\theta}(\pi; \rho)}^{\infty} v(\theta, \pi; \rho) dH(\theta) . \text{ This function is decreasing in } \pi:$$

$$(7) \quad \frac{dM}{d\pi} = -v(\hat{\theta}, \pi; \rho) - \delta \int_{\hat{\theta}}^{\infty} [R(\theta) + \ell] dH < 0.$$

Expected rents fall because the marginal firm investing in influence drops out and because the inframarginal firms forgo second-period rents, R , and suffer a loss, ℓ .

FIGURE 3. AN INCREASE IN PROBABILITY OF ALTERNATION (π) LOWERS THE RETURN ON INVESTING IN INFLUENCE AND RAISES THE SWITCH POINT ($\hat{\theta}$).



Under what circumstances does electoral uncertainty have a large influence on investment in influence? Electoral uncertainty is a more important restraint on investing in influence, the weaker the institutional constraints (ρ) on rent-seeking. In this model, the two are *substitutes*. It is likely to be particularly strong in the postcommunist countries because new beliefs about expected alternation are formed in that period, new political parties emerge, and restraints on influence-

buying are weak. Formally, $dx/d\pi$ and $dM/d\pi$ decrease in absolute value with an increase in ρ , the restraints on rents:¹²

$$(8) \quad |x_{\pi\rho}| = \delta H'(\hat{\theta}) \frac{R_\rho R_\theta + R_{\theta\rho} [R(\hat{\theta}) + \ell]}{R_\theta^2 [1 + \delta - \delta\pi]} < 0$$

$$(9) \quad |M_{\pi\rho}| = v_\rho - R(\hat{\theta}) + \delta \int_{\hat{\theta}}^{\infty} R_\rho dH < 0.$$

The decreases in $dx/d\pi$ and/or $dM/d\pi$ are greater, the greater the effect of institutional constraints on rents (i.e. the greater is R_ρ and thus v_ρ), the greater the marginal rents ($R(\hat{\theta})$), the flatter the slope of $R(\theta;\rho)$ with respect to θ , and the more an increase in ρ flattens that slope ($R_{\theta\rho}$).

In summary, the model makes the following predictions:

- a. An increase in expected alternation in power reduces the proportion of firms that invest in influence and the aggregate rents that they obtain.

- b. These effects are stronger when the institutional constraints on rent-seeking are weaker.

Thus, the impact of alternation on the quality of governance will be weaker, if it exists at all, in countries with strong governance institutions.

- c. Good governance is more likely to occur when there are only limited rents that powerholders can extract from the rest of society. Thus, it is more likely when a smaller share of a country's GDP is in the form of exports of natural resources that require no processing and can be sold on thick international markets, where they are hard to trace.

Our model of investing in influence is a short-run model in which weak institutions shape the terrain in which firms adapt as a function of the expected probability of alternation in the seat of

¹² An effect that might seem to go the other way in our model is that an increase in ℓ would make expected returns to rent-seeking *more* sensitive to π . But in a richer model, we would take into account that for institutional constraints (ρ) sufficiently large, the civil service and judiciary would be insulated from the reach of the dominant party and so punishment would be independent of political alternation.

power. In the long run, firms' behavior reshapes the institutions so that, as emphasized in equations (8) and (9), the effect of alternation on governance differs across countries, and the cross-country regressions that we analyze here would be too blunt an instrument to test the predicted effect of political alternation.

III. DEFINING AND MEASURING ALTERNATION IN POWER

Testing the theory calls for relating measures of expectations about the probability of political alternation, to indicators of the quality of governance. We do not observe expectations, but certain events that occur during political liberalization may have a large effect in shaping expectations and thus proxy for expectations. We assume that the greater the number of alternations in power since the onset of political liberalization, the greater the expectation of political alternation in the *current* period. We have constructed measures of political alternation for all 27 post-communist countries for which data are available. The measures represent hypothetical answers to the question, What kinds of political turnover are likely to render "corruption contracts" unenforceable?

To define political alternation in a meaningful way, we need to decide three things: Where is the seat of power in the national government? What constitutes a change in the occupant of the seat of power? When can this change be said to constitute a change in ideology, *e.g.*, a left-wing coalition replacing a right-wing coalition? We consider each question in turn.

In identifying the seat of power, we distinguish *authoritarian*, *presidential democratic* and *parliamentary democratic* systems. At a given point in time, *authoritarian* countries are countries whose democracy scores are less than or equal to -4 according to the *Polity2* variable from the PolityIV data base. The *Polity2* score ranges from -10 (full autocracy) to +10 (full democracy). It is derived by subtracting a scale of autocracy (0 to 10) from a scale of democracy (0 to 10). (Democracy and autocracy are distinct indicators; they do not have common components; see Marshall and Jaggers, 2000, p. 14.)

The remaining (non-authoritarian) countries are divided into two groups--presidential democracies and parliamentary democracies-- based on whether there is a presidency that possesses significant law-making power. *Presidential democracies* have “strong presidents,” defined as having either decree powers or veto power that can be overridden only by legislative supermajorities. *Parliamentary democracies* are non-authoritarian states without strong presidents.

Once the locus (seat) of power is identified, we have to define what constitutes a change in the actor who holds power. We count personal changes in the locus of power. In authoritarian states, this is a change in the ruler. In democracies, a change is counted when control of all veto-wielding legislative houses changes. What happens if there is a broad change in the governing coalition in a legislative house, but one or more small parties remain from the old governing coalition? We count a change only if at least two-thirds of the seats of the new governing coalition are held by parties that were not part of the old governing coalition. In *presidential* democratic systems, the president, too, must change. A change of control of some but not all of the relevant veto-wielding institutions is *not counted*.

For example, if control of a unicameral legislature shifts and the presidency is not strong, this counts as a political alternation. If control of a unicameral legislature shifts but the holder of a strong presidency does not, this does not count as a change. If a new president is elected but control of the legislature does not change, then again this does not count as a change. On the other hand, if a change in all the law-making institutions of the state is completed over more than one electoral cycle, the change is coded as having occurred in the year that the change in control becomes complete. Thus, if control of the presidency changed in an earlier election and has not changed since and, in the current election, control of the legislature shifts to parties supportive of the president, then one change is counted as having occurred in the current election.

As shown in Table 1, no alternation in the seat of power occurred in Kazakhstan, Turkmenistan, and Uzbekistan. How are scores of zero possible? Why doesn't the collapse of the USSR automatically count in our measure of alternation for all the Soviet successor states? Our

coding principle is that the first successor state government must be a new ruler in its republic to be counted as a change. If such a new institutional ruler did come to power, the change is coded as occurring in the year that he began to wield effective authority in the republic—either 1990 or 1991. The collapse of the Soviet Union did not involve an alternation in the holder of the seat of power in Azerbaijan, Belarus, Kazakhstan, Tajikistan, Turkmenistan, and Uzbekistan. For the same reason, no alternation is counted as having occurred in 1991 in Macedonia, Montenegro, and Serbia with the break-up of Yugoslavia. In Appendix Table A-1, we list the 27 post-communist countries in our data, along with their cumulative alternation scores by year 2006.

TABLE 1. SUMMARY STATISTICS FOR TWO MEASURES OF ALTERNATION IN THE TRANSITION ECONOMIES, UP TO AND INCLUDING YEAR 2006

	Cumulative political alternation	Cumulative ideological alternation
Mean	2.71	1.93
Median	3	1.5
Minimum	0 ^a	0 ^b
Maximum	5	4
Countries with the maximum	Lithuania Slovakia	Lithuania Slovakia Bulgaria, Hungary Macedonia
Correlation with cumulative political alternation	1	0.84 (0.00)

Note:

- a. Countries are Kazakhstan, Turkmenistan, and Uzbekistan.
- b. Countries are those in note a. plus Belarus and Tajikistan.
- c. Correlation is calculated across all years. *p*-value is in parentheses.

An obvious refinement, which we call *ideological alternation*, is to count only those political alternations in which the shift of power also entails a shift of ideology. In the latter case, alternation may be more likely than in the form case to entail an end to the privileged government treatment that select groups of businesses enjoyed under the predecessor regime. In order to define what constitutes an ideological alternation, we use a new database on political institutions, the Post-

Communist Party Ideology database developed by Horowitz and Browne (2005). Ideologies of governments are here understood in terms of the positions of ruling individuals, groups, or parties on the most salient policy issues. Following the tradition of much applied work in comparative politics, we use a two-dimensional policy space, where one dimension captures left-right differences in economic ideology-cum-policy, and the other dimension captures differences in “national identity” policies. In economic policy, the main issue that faced the post-communist world in its first dozen years was whether, and how, to make the transition from planning or market socialism to capitalism. In debates over national identity, the main policy issues concerned the status and treatment of internal ethnic minorities and of ethnic groups in neighboring countries. To code leaders and parties, we use criteria described in Appendix A and Horowitz, Hoff and Milanovic (forthcoming) to distinguish four intervals along each of the two ideology-cum-policy dimensions; see Table 2. The number in each cell represents total country/years that ideologically different parties or coalitions were in power over the period 1989-2006. For example, center-left parties were in power for 188 country/years or almost 39 percent of country/time.

TABLE 2. IDEOLOGICAL CLASSIFICATION SCHEME FOR PARTIES CONTESTING ELECTIONS IN POST-COMMUNIST COUNTRIES, AND NUMBER OF COUNTRY/YEARS RULED BY DIFFERENT REGIMES

<i>Economic ideology</i> <i>National identity policy</i>	<i>Far Left</i>	<i>Center-Left</i>	<i>Center-Right</i>	<i>Far Right</i>
Extreme Nationalist	0	0	0	0
Moderate Nationalist	66	188	229	0
Moderate Autonomist	3*	0	0	0
Secessionist	0	0	0	0

Note. Total number of country/years is 18 years times 27 countries = 486.

*Moldova 2001, 2002, and 2003.

TABLE 3. CONSTRUCTION OF THE CUMULATIVE ALTERNATION MEASURES IN HUNGARY AND RUSSIA

	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06
Hungary																		
Political alternation		1				2				3				4				
Ideological alternation		1				2				3				4				
Ideology	F	R	R	R	R	L	L	L	L	R	R	R	R	L	L	L	L	L
Political system	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Russia																		
Political alternation			1								2							
Ideological alternation			1															
Ideology	F	F	F	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
Political system	3	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

Notes: Ideologies are F = far left, L = center-left, R = center-right . Political systems are 1=parliamentary, 2=presidential, 3=authoritarian.

Table 3 illustrates the construction of alternation indices for Hungary and Russia. Hungary is a parliamentary democracy with unicameral legislature and a weak presidency., and so only changes in control of the legislature are relevant for measuring political alternation. Through the end of 2006, parliamentary elections brought new ruling parties or party coalitions to power in March 1990 (center-right), May 1994 (center-left), May 1998 (center-right), and April 2002 (center-left). All of these political alternations brought ideologically different parties or coalitions to power, so that there is no difference between the value of our measures of political and ideological alternation.

Russia has had a *Polity2* score above -4 throughout the period of our analysis (*Polity2* score = 4 until 1999, and 7 beginning 2000). We characterize it as a strong presidency, and so changes must occur in both the presidency and the legislature to be counted as an alternation in the seat of power. The first political alternation occurred in August 1991, when the failure of the hard-line communist coup attempt against Mikhail Gorbachev transferred effective power to Boris Yeltsin and the Russian legislature and led to the break-up of the Soviet Union. President Yeltsin remained in power until December 1999, when he resigned in favor of Vladimir Putin. As prime minister, Putin had led his United Russia Party to success in the December 1999 lower house elections. Thus, in December 1999, a full political alternation was completed as a new president and a supporting lower house coalition came to power. The regionally selected upper house, founded in 1996, had its selection principles amended to guarantee support for Putin. Through 2006, this late 1999 political alternation was the only one since August 1991. Putin and his supporting parliamentary coalition are not classified as having a different ideology from Yeltsin and his supporting coalition, so there is no ideological alternation in 1999.

IV. EMPIRICAL STRATEGY

Figure 4 shows the scatter plot of cumulative political alternations in 1989-95 and the rule of law score in 2006 in post-communist countries. The figure shows that large differences in the rule of law score are associated with each additional political alternation; the simple correlation between rule of law in 2006 and cumulative political alternation is 0.73.¹³ Every country that had at least three political alternations by 1996 (inclusive of 1996) has a rule of law score in 2006 above the world average.

Figure 5 presents the same data in a different way. We divide the post-communist countries into two groups, those with at most one political alternation by the end of 1996 and those with two or more. For each group, the figure plots the kernel density of the rule of law score in 2006. The first group had an average score of -0.83, while the second had an average score around 0,¹⁴ and the two distributions do not overlap very much at all.

¹³ The use of an alternative governance measure (control of corruption) and alternation measure (ideological alternation) yields virtually identical results to the ones shown in the figure.

¹⁴ The *t*-test rejects equality of the means.

FIGURE 4. CUMULATIVE POLITICAL ALTERNATION BEFORE 1996 AND RULE OF LAW IN 2006 IN POST-COMMUNIST COUNTRIES

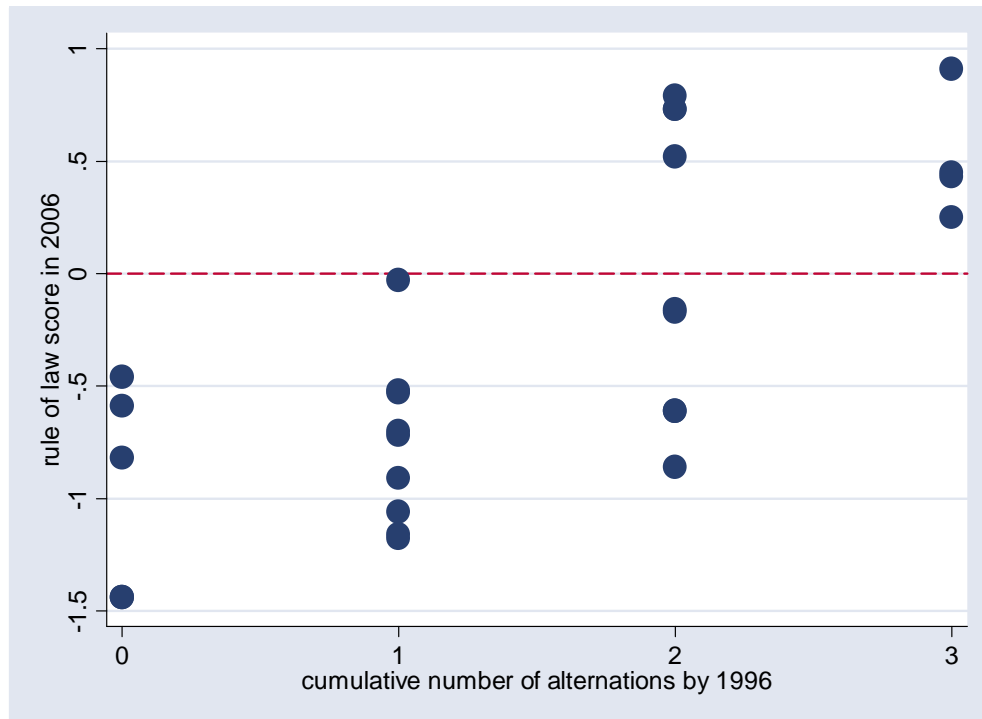
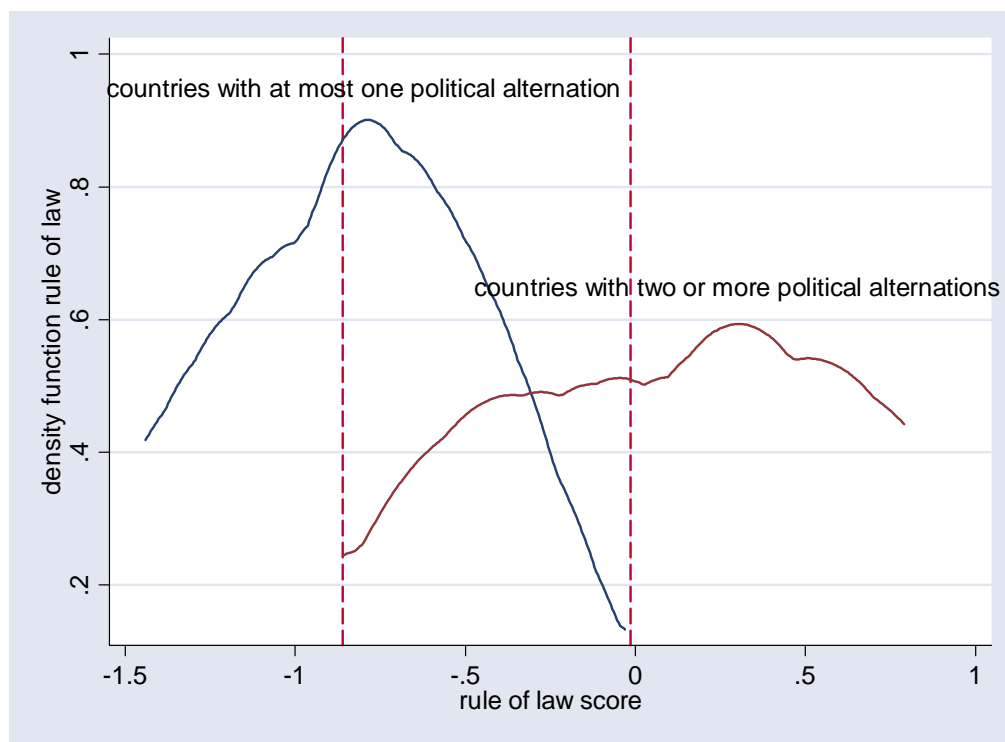


FIGURE 5. KERNEL DENSITY FUNCTIONS OF 2006 RULE OF LAW SCORE



Note: The means are shown by the two vertical lines.

Our model identifies a role for expected political alternation as a restraint on “corruption contracts” in countries with weak formal constraints on corruption. We measure cumulative political alternation between 1989 and year t , where $t \in \{1996, 1998, 2000, 2002, 2003, 2004, 2005, 2006\}$ ¹⁵ and use that measure as a proxy for expectations as of time t of political alternation in the future. We treat the period 1996-2006 as one “slice of time.” Our hypothesis is that the cumulative number of political alternations is positively related to governance indicators. We estimate the reduced form equation,

$$(10) \quad GOV_{it} = \beta_0 + \beta_1 ALT_{it} + X_{it}'\Gamma + \gamma_i + \varepsilon_{it}$$

where the subscripts i and t index, respectively, countries and years. X_{it} is a vector of covariates and γ_i are country dummies. ALT_{it} is cumulative political or ideological alternation (“alternation,” for short).

The dependent variable is the KKM *rule of law* measure.¹⁶ It is defined as the extent to which agents have confidence in, and abide by, the rules. The measure focuses on the quality of contract enforcement and property rights. Among the available governance measures, we believe that this measure captures most closely the phenomena with which we are concerned—the quality of governance affected by the exercise of political power. The KKM data are composite indicators based on pre-existing sources, which include expert surveys and estimates by government, NGOs, and credit rating agencies. Since, as discussed above, the indicator is scaled so that the average and median value for the world is 0, a country’s score gives its relative position in the world. However, among those pre-existing data sources that are measured in absolute terms, there is no clear time trend between 1996 and 2006. Thus, KKM conclude that the measures for each country over time can be read as absolute changes. Relative to the world as a whole, there is a slight upward time trend in the mean rule of law

¹⁵ This set is all years for which KKM measures of governance were available.

¹⁶ Later we also use another KKM measure, control of corruption.

indicator for the post-communist countries: the mean is -0.44 in 1996, -0.42 in 2000, and about -0.35 in 2004-2006, where a unit is a standard deviation for the world.

On the right-hand side of (10), we have *ALT* and a number of other variables that previous work has found to influence the quality of governance: level of income (we use GDP per capita at in 1990 so that we do not capture the effect of what we are trying to predict---governance--on the predictor variable—income), the extent of democracy (proxied by the *Polity2* variable running from -10 to +10), cumulative years of war, share of fuel exports in GDP,¹⁷ and the number of years of communist rule.¹⁸ Table 4 presents summary descriptive statistics, and Appendix B gives the sources and exact definitions of the variables.

TABLE 4. DESCRIPTIVE STATISTICS FOR SELECTED VARIABLES, POST-COMMUNIST COUNTRIES

	Mean	Standard deviation
Rule of law ^a	-0.390	0.669
Control of corruption ^a	-0.400	0.650
GDP per capita in 1990 in natural logs, \$PPP	8.87	0.59
Fuel exports as share of GDP in 1996-97	0.047	0.103
Democracy (<i>Polity2</i> score) ^a	3.68	6.63
Years of communism	55.2	13.3
Pre-communist literacy (% of adult population)	55.2	30.2
Urbanization rate in 1989-90 (in percent)	56.2	12.3

^aFor the period 1996-2006.

We investigate whether alternation has an influence on the quality of governance controlling for democracy and number of years of Communist rule. Therefore we use all three

¹⁷ We use the earliest year available for fuel exports (1996 or 1997) in order to abstract from endogeneity between (bad) governance and dependence on fuel exports.

¹⁸ Regarding democracy, see *e.g.* Treisman (2002) for transition economies and Goldsmith (1999) and Lipset and Linz (1999) for a general treatment. A large literature on the “natural resource curse” points to a variety of reasons why a high share of GDP from natural resource exports, such as fuel, which requires little or no processing, would lead to worse governance—see, *e.g.*, Robinson *et al.* (2006) and Murshed (2004). For the impact of the political system, including communist rule, on governance, see *e.g.* Lederman, Loayza and Soares (2005).

variables in our empirical analysis. These variables measure distinct aspects of the political process: Democracy can coexist with infrequent alternation in power, as long rules of Social Democrats in Sweden (1936-76) and Liberal Democrats in Japan (1955-93) attest. However, in our sample, in which political liberalization is recent, the correlation between cumulative alternation and the level of democracy is +0.68 to +0.69 (see Table 5). The correlation between cumulative alternation by year 2006 and the number of years of Communist rule experienced by a country (in the past) is strongly negative, between -0.77 and -0.78.

TABLE 5. CORRELATIONS BETWEEN POLITICAL VARIABLES

	Cumulative political alternation	Cumulative ideological alternation	Number of observations
Democracy ^a	0.68 (0.00)	0.69 (0.00)	475
Number of years of Communist rule ^b	-0.77 (0.00)	-0.78 (0.00)	27

Note: *p*-values are in parentheses.

a. Calculated across all years. Each observation is a country/year.

b. Calculated for the year 2006 only.

The inclusion of democracy on the right-hand side of our regression together with alternation is likely to impart a downward bias to alternation. Alternation influences the coziness of relationships between firms and the state, and that, in turn, influences both our dependent variable (*GOV*) and the level of democracy. Some of the effect of alternation may thus be ascribed to the democracy variable.

A central difficulty in our analysis is that alternation is itself an endogenous variable. There may be two-way causation between alternation and the rule of law. It may be that better governance in any given year expands political competition, which increases political alternation and also has persistent effects on the quality of governance. Then the measured influence of alternation would reflect a simultaneous influence between alternation and governance. The influence of governance on alternation could also go the other way, if more corrupt governments are more likely to lose power. To abstract from simultaneity, we use as instruments for alternation

two variables: the level of literacy in the country prior to Communist rule and the level of urbanization around the time of regime change, in 1989-91. The logic is as follows. Higher level of literacy denotes greater sophistication of the public and greater ability to judge the programs and accomplishments of different parties. More informed voters compared to “machine-politics” are likely to produce greater number of turnovers in government. On the other hand, higher literacy is no guarantee of greater probity, either in government or in ordinary life. Thus we do not predict a direct influence from greater literacy in the pre-communist period and better governance. However, we have not modeled the historical forces that gave rise to higher literacy in the pre-communist period. We cannot rule out that those forces persisted during some 50 to 70 years of communist rule that most of the countries in our sample experienced, and that they contributed to better governance outcomes after communism collapsed.

The level of urbanization in 1989-1990 is introduced as an additional instrument on the assumption that political mobilization is more easily achieved in urban areas. More urbanized countries can be expected to have a politically more engaged populace, which could also be a factor in more frequent alternation of government. Since we control for income per capita (which is strongly correlated with urbanization), we do not expect any direct link between greater urbanization and better (or worse) governance.

V. EMPIRICAL RESULTS

The first three columns of Table 6 present regressions with the KKM rule of law score as the dependent variable. So as not to understate the standard errors, the p -values are based on standard errors corrected to take into account correlation in the error term across years in a given country. It turns out that no important differences arise when we replace political alternation with ideological alternation. Therefore we report only the effect of political alternation.

TABLE 6. OLS AND IV ESTIMATES OF THE RELATIONSHIP BETWEEN QUALITY OF GOVERNANCE AND POLITICAL ALTERNATION

	Rule of law			Control of corruption		
	Pooled OLS	Fixed effects	IV	Pooled OLS	Fixed effects	IV
	(1)	(2)	(3)	(4)	(5)	(6)
Alternation	0.222*** (0.002)	0.034 (0.311)	0.714*** (0)	0.203** (0.007)	-0.001 (0.982)	0.633*** (0)
GDP per capita in 1990 ^a	0.591** (0.007)		0.997*** (0)	0.637*** (0.003)		0.916*** (0)
GDP per capita		0.244** (0.036)			0.431** (0.009)	
War (cumulative)	-0.111* (0.071)	-0.128 (0.557)	-0.120** (0.02)	-0.100** (0.045)	-0.261 (0.396)	-0.098** (0.03)
Fuel/GDP in 1996-97	-5.00* (0.055)		-14.34*** (0.001)	-6.265** (0.014)		-13.89*** (0)
Fuel/GDP		-0.378 (0.300)			-1.317** (0.012)	
Communist years	-0.011 (0.247)		0.013 (0.389)	-0.010 (0.268)		0.011 (0.427)
Democracy (<i>Polity2</i>)	-0.030 (0.159)	0.004 (0.623)	-0.118*** (0)	-0.035* (0.088)	0.009 (0.396)	-0.109*** (0)
Constant	-5.112** (0.011)	-2.388** (0.018)	-10.46*** (0)	-5.526** (0.006)	-3.869** (0.007)	-9.606*** (0)
R ² adjusted	0.733	0.127	0.416	0.707	0.105	0.452
F	29.57	3.67	26.36	22.56	2.95	22.06
Number of observations	183	156	183	183	156	183
F test of excluded instruments	---	---	11.50	---	---	11.50
Hansen J statistic			0.041 (0.84)			0.27 (0.60)

Note: *** Significant at 1 percent. ** Significant at 5 percent. * Significant at 10 percent.

p values shown between parentheses. "0" indicates *p*=0.000.

a. In natural logs.

Column 1 reports the results of pooled cross-sectional and time series regressions without country fixed effects.¹⁹ One additional alternation is associated with a significant improvement in the rule of law score (*p*-value = 0.002). The estimated coefficient of 0.22 means that in our sample, an increase of one political alternation is associated with one-third of a standard deviation

¹⁹ When we regress residuals from the pooled regression against time, they display no time trend. This provides justification for treating the time-ordered cross section observations for 1996-2006 as independent.

increase in the rule of law score among post-communist countries. The only other factor in column 1 that is significantly associated with the quality of governance is the pre-transition income level. Each 10 percent increase in 1990 per capita GDP is associated with an increase in the rule of law score of about 0.06 (that is about one-tenth of post-communist countries' rule of law standard deviation).

Column 2 reports the effect of adding fixed country effects. It shows that adding fixed effects makes the estimated coefficient very small (0.03) and statistically insignificant ($p = 0.31$). Thus, controlling for the observable characteristics emphasized in the earlier literature as well as unobservable country effects, political alternation has the expected sign but is not significant. We interpret this to mean that unobservable (or difficult to quantify) country-specific characteristics play a very important role in determining both governance and alternation. Besides the country fixed effect, the only regressor that is statistically significant at a conventional level in this regression is per capita GDP. In our other regressions²⁰, and also a robust finding in earlier studies, is that income has also been found to be strongly correlated with lower corruption, although the direction of causation is unknown.

To shed light on the causal influence of alternation on governance, we instrument for political alternation in the regression reported in column 3, Table 6. As discussed above, we use as instruments the literacy rate prior to the Communist takeover and the rate of urbanization around 1990. Literacy is a plausible instrument for political alternation because the potential for civic and political culture to emerge after the fall of communism is likely to be greater in those countries that were more literate at the onset of communism, and thus where citizens were better able to make independent political judgments about the period of communist rule.²¹ It may also be that those countries with greater literacy were more successful states, for which communism was perceived as a greater setback. This too could contribute to political alternation by making it more likely that the

²⁰ In fixed effects regressions, GDP per capita enters contemporaneously. The results are very similar.

²¹ See for example Besley and Burgess (2002).

communist elite would be replaced by a new generation of political leaders. While we view the effect of literacy on the possibilities for independent political judgment as unambiguous, we cannot rule out the possibility that whatever aspects of a society led to broader literacy in the pre-communist period also led to better governance in the post-communist period.

A second instrument that we use for political alternation is urbanization in 1989-1990. This is a plausible instrument because greater urbanization lowers the cost of voter mobilization, increasing the likelihood that several genuinely different parties will emerge. However, urbanization can have this effect only if certain other conditions are present—such as the emergence of leaders who feel free to oppose the governing party—and so we view this as a weaker predictor of political alternation.

Table A-2 (Appendix) shows the first-stage IV regressions. As expected, the level of pre-communist literacy is a strong predictor of cumulative political alternation, but the rate of urbanization in 1989-90 is not significant. The F statistic regression is 11.5, which is significant, and Anderson's identification test for the irrelevance of instruments is strongly rejected. Based on Hansen's J statistics, reported in Table 6, column 3, the null hypothesis that instruments are correctly excluded from the second stage regression is easily accepted.

Column 3 of Table 6 shows the second-stage regression. Instrumented political alternation is a significant predictor of rule of law score ($p=0.00$) and the effect is very large. In this sample, one additional alternation is associated with an improvement of 0.71 points in the rule of law score. Recall that for the post-communist countries, the standard deviation in rule of law scores is 0.7, so the coefficient means that one additional alternation predicts an improvement in governance of one full standard deviation in rule of law scores in our sample.

Earlier literature has used the number of years of communist rule as an explanatory variable (see e.g., Treisman, 2002) and shown that it is associated with a large change in the quality of governance in the post-communist period (with countries with longer years of rule having worse governance outcomes). However, our results in both the OLS and IV regressions show that the

influence of the duration of communist rule is insignificant when alternation is included as a predictor in the regression. A tentative conclusion from our results is that the mechanism through which years of communism matters is through its effect on political alternation. When we exclude years of communism from the second stage regression (results not shown here), the estimated coefficient for alternation increases.

The coefficient for democracy is near zero and is statistically insignificant in two formulations, which is consistent with Treisman's work using different measures of democracy. However democracy significantly reduces the quality of governance in the IV regression. Thus, political alternation seems to crowd out the putatively positive effect of democracy. It is more difficult to explain why greater democracy, for a given number of alternations in power, would make governance *worse*.

Cumulative duration of war hurts governance: the variable has a negative sign in all regressions. In the IV regression, each additional year of war reduces the rule of law indicator by 12 percent, or one-sixth of a standard deviation of rule of law scores in our sample.²²

As predicted by our model, as well as the literature on the natural resource curse discussed above, a higher share of fuel exports in GDP worsens governance. The effect is particularly obvious in IV formulation where each 1 percent increase in fuel exports' share in GDP reduces the predicted rule of law score by 0.14 points.

As a robustness check, we present in columns 4-6 of Table 6 regressions with another measure of governance from the KKM database, "control of corruption." This measure is defined as "the exercise of public power for private gain." This measure is also scaled so that the average and median for the world are zero and the standard deviation is one, with a higher score denoting better governance. We consider the control of corruption index a noisier measure of those aspects of the quality of governance affected by clientelism between firms and the government. To curtail

²² War has a more pronounced effect when the regressions are run up to 2002 or 2003. As wars on the territories of transition countries have ceased, the impact of the variable on governance has somewhat faded.

petty corruption, much more than political change at the top is required. However, the results, reported in Table 6 (columns 4 to 6) for the same three specifications as before (pooled data, fixed effects, and IV) are practically the same as when we use the rule of law indicator as our dependent variable.

VI. CONCLUSION

If investing in influence to obtain privileged treatment from the state is regarded like any other economic activity, then it is clear that businesses will engage in it more when the returns are higher. There are many examples, in many countries, where it is a common knowledge that paying off influential politicians to buy property rights à la carte, and paying off judges to obtain favorable rulings, are more lucrative than seeking profits through strictly economic—not political—investments. The weak link in the chain from those who buy influence to those who dispense favors is that the latter cannot always “deliver”: they may have lost political power. And when this happens frequently enough, the returns to investing in influence decline and eventually fewer people engage in it. Democracy and political alternation thus play a key role in creating a situation in which the implicit contract cannot be executed although there is good will on both sides—politicians and investors in influence. We have explored this hypothesis for the post-communist countries during the early period of political liberalization, when political alternation was not routinized. Under our hypothesis, the fact that alternation did, or did not, occur sent a powerful signal both to those who might invest in influence and to politicians, and changed their incentives.

We find that more frequent political alternation is associated with better governance. This result continues to hold when we control for a number of other plausible influences on governance (income, war, democracy, dependence on fuel exports, and number of years of Communist rule) as well as when we instrument for political alternation. However, it does not hold in OLS regressions with fixed country effects. This suggests that we are still at an early stage of understanding the

systematic forces that explain the diversity of governance outcomes across the post-communist countries.

A further question concerns the generality of our results across regions and periods. The case of the post-communist countries of Eastern Europe and the former Soviet Union is special in at least two important respects. First, the transition entailed a liberalization in political and economic spheres simultaneously, and second, before the liberalizations, the set of private economic interest groups was very small. In many postcommunist countries, there was a wholesale movement of the former nomenklatura into business, who were well-placed to establish a 'special' relationship with government as long as the former nomenklatura remained in government. Thus, it might be that political alternation, and in particular, the *first* political alternation, is more important in the post-communist countries than it would be in others following an initial democraticization. On the other hand, it is a very general point that powerful firms will not have an incentive to subject protection of their property rights to a general apparatus (the rule of law) as long as they feel confident that they can obtain privileged protection from the state through their special relationship to the party in power.

Our results suggest clearly that in a setting in which alternation in power has not been routinized, there may be a trade-off between the ability of a strong unified government and friendly legislature to push through painful economic reforms, and the corrosion of reforms that results when persistence in power of the reforming party widens corruption and lowers the quality of governance. The long-term effects on governance may turn out to be more important than the short-term effects on reform. One could argue that the best outcome for a newly democratizing country is that the government that has jump-started the reforms is thrown out of office, so long as its reforms survive. Political alternation may sever the clientelistic links that have been created between the reformers and influential business circles. Then the reform process continues on a more level playing field.

Appendix A. Ideological Classification of Parties in Post-Communist Countries and Coding of Ideological Alternation

Here we explain the rules for coding post-communist ideological differences and ideological alternation.

Ideological classification of parties. The criteria for distinguishing economic ideology (columns in Table 2) are as follows:

- *Far left:* Favors total or extensive state ownership and control of the economy. Market transition policies that dramatically weaken state control or unevenly affect the population are to be avoided.
- *Center left:* Favors private ownership and control of the economy outside of government services; favors heavy income taxation to finance a generous, broad-based welfare state. Market transition policies that dramatically weaken state control or unevenly affect the population are necessary, but should be cushioned by generous safety nets and transitional assistance.
- *Center right:* Favors private ownership and control of the economy outside of government services; favors moderate income taxation to finance a limited welfare state targeting the poor and the disabled. Market transition policies that dramatically weaken state control or unevenly affect the population are necessary. In order to preserve incentives for structural adjustment, transition policies should be cushioned with only limited safety nets and transitional assistance.
- *Far right:* Favors private ownership and control of the economy, including a large proportion of government services; favors only light income taxation to finance welfare policies targeting the disabled. Market transition policies that dramatically weaken state control or unevenly affect the population are necessary. In order to preserve incentives for structural adjustment, transition policies should be cushioned only with very limited safety nets and transitional assistance.

The criteria for distinguishing national identity-related policy (rows in Table 2) are:

- *Extreme nationalist (top):* The highest collective goals are protection of national security and national cultural identity, and the pursuit of national economic prosperity. These goals justify the

use of discriminatory policies and, if necessary, force. Ethnic minorities have no claim to equal rights, and/or neighboring territories containing large concentrations of the state's dominant ethnic group should be incorporated.

- *Moderate nationalist (top center)*: The highest collective goals are protection of national security and national cultural identity, and the pursuit of national economic prosperity. Ethnic minorities have a claim to equal rights as long as this does not jeopardize national security, national cultural identity, and economic prosperity. There is no right to forcibly intervene in the affairs of neighboring territories containing large concentrations of the state's dominant ethnic group, unless its political and cultural rights are seriously threatened.
- *Moderate autonomist (bottom center)*: Protection of the majority's national ethnic identity and pursuit of collective policy priorities must be reconciled with protection of minority ethnic or regional identities and priorities. This is usually to be achieved through the devolution of political powers down to the regional and local levels.
- *Secessionist (bottom)*: Protection of minority ethnic or regional identity and priorities cannot be reconciled with majority pursuit of national ethnic priorities. Such minority protection can only be achieved through political independence of minority regions, achieved through secession, adherence to a similarly constituted neighboring state, or at a minimum, special autonomy status combined with constitutionally imbedded minority veto power over important legislation at the national level.

Definition of ideological alternation. An ideological change is counted as occurring in a given year if the ideology of the dominant leader, party, or party coalition has changed. A change must involve a full transfer of the legislative and executive law-making powers to a *new* leader, party, or coalition of a different ideological persuasion, as defined by the 4-by-4 ideological classification of Table 2. Thus, a country where the institutional has not changed but a continuing communist-era authoritarian leader “rebrands” himself with a center-left or center-right ideology—such as Kazakhstan’s Nursultan Nazarbayev or Uzbekistan’s Islam Karimov—is not counted as

having undergone an ideological change with the collapse of the Soviet Union. On the other hand, when a communist party wins an initial, fairly conducted postcommunist election after having reformed itself into a center-left, European-style social democratic party—as the Bulgarian Socialist Party did in 1990—this is counted as an ideological change.

In democratic political systems, ideological control of all veto-wielding legislative houses must change. We count change as occurring only if at least two-thirds of the seats of the new governing coalition are held by parties that were not part of the old governing coalition. In democracies with strong presidencies, the president's ideology too must change. An ideological shift in the control of some but not all of the relevant veto-wielding institutions is not counted. On the other hand, if an ideological change in the control of all the relevant law-making institutions is completed over more than one electoral cycle, a change is coded as having occurred in the year that the change in control becomes complete.

Appendix B. Data Sources

The following data sources provided variables used in the paper:

Governance: The KKM rule of law index and the KKM control of corruption index are available at: <http://www.worldbank.org/wbi/governance/pubs/govmatters4.html>.

They are weighted composite indicators based on pre-existing sources. The methodology is described in Kaufmann, Kraay, and Mastruzzi (2003) and on the website. The data are available at two-year intervals for the period 1996-2002, and after that period, that is from 2002 to 2006, at annual intervals..

Democracy: Democracy is proxied by the variable *Polity2*, from the Polity IV database available at <http://www.cidcm.umd.edu/inscr/polity/> (updated in May 2008).

Income per capita: Proxied by GDP per capita. The data are from the World Development Indicators data base (accessed in May 2008); values expressed in 2006 PPP dollars.

Political system and alternation: These data are constructed by the authors, based on Horowitz and Browne (2005), as explained in Section II and Horowitz, Hoff and Milanovic (forthcoming).

Cumulative involvement in war: Our measure is defined as the proportion of time the country was involved in large-scale military conflict since 1989 or, for the former Soviet Republics, since their independence in August 1991. The data are created by the authors.

Share of fuel exports: Our measure is the share in GDP of exports of oil, natural gas, and gold in the first year that World Bank data are available (1996 or 1997). The source is the World Bank Development Data Platform (DDP) database.

Literacy in the 1930s: Percentage of adult population that is literate. Data from Darden and Grzymala-Busse (2006, p.113), Plestina (1992, p.181), and Rothschild (1974, pp. 37, 44, 92, 166-7, 285, 327, 332, 359, 369).

Urbanization rates in 1989-90: Percentage of population living in urban areas. Data from World Bank (1996, p.175).

TABLE A-1. NUMBER OF POLITICAL ALTERNATIONS BETWEEN THE COLLAPSE OF COMMUNISM
AND UP THROUGH AND INCLUDING 2006

Number of political alternations	Countries
None	Uzbekistan Turkmenistan Kazakhstan
1	Belarus Tajikistan
2	Russia Serbia Kyrgyzstan Armenia
3	Albania Slovenia Ukraine Azerbaijan Georgia Bosnia Latvia Croatia Macedonia
4	Bulgaria Poland Romania Estonia Czech republic Hungary Moldova
5	Slovakia Lithuania

TABLE A-2. FIRST-STAGE REGRESSION RESULTS USING AS INSTRUMENTS PRE-COMMUNIST LITERACY RATE AND 1989-90 URBANIZATION RATE (DEPENDENT VARIABLE: POLITICAL ALTERNATION)

	Coefficient (<i>p</i> levels)
GDP per capita in 1990 ^a	-1.966*** (0.000)
War (cumulative)	-0.061 (0.238)
Fuel/GDP in 1996-97	30.50*** (0.000)
Democracy (<i>Polity2</i>)	0.172*** (0.000)
Communist years	-0.351** (0.017)
Literacy rate	0.039*** (0.001)
Urbanization rate	-0.015 (0.37)
Constant	18.66*** (0.000)
F test of excluded instruments	11.50*** (0.0004)
Anderson canonical correlation test	62.36*** (0.000)
R ²	0.75
<i>N</i>	183

Note: The results are the first-stage estimates for the second-stage regressions reported in Table 6, columns (3) and (6), respectively. Coefficients with three, two and one asterisk are statistically significant at respectively 10, 5 and 1 percent. *p* values shown between brackets.

a. In natural logs.

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